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ABSTRACT

Affect, curiosity, and socialization-relation were explored as potential mediators of the relationship between both state and trait affect and job performance. The cross-sectional sample consisted of 81 women and 152 men between the ages of 17 and 50 or older. The typical participant was a male Caucasian under the age of 40 with some college education and an annual salary of less than $30,000 per year. The participants were obtained from four well-established service industry companies in the Washington, D.C., metropolitan area. The data collection measures included the State-Trait Personality Inventory, a modified version of the Workplace Adaptation Questionnaire, a self-reported measure of job performance, and demographic survey. Two a priori determined "recursive" path models suggesting the causal influence of anger, anxiety, and curiosity on socialization-related learning and (ultimately) job performance were tested. The study provided empirical support for the notion that anger and anxiety, which are two types of emotion that are often overlooked by organizational researchers, can either foster or deter workplace job performance through their influence on individual learning. The study also yielded evidence suggesting that curiosity might be an important mediator between emotion and job performance. (Contains 26 references.) (MN)

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Affect, curiosity, and socialization-related learning: A path analysis of antecedents to job performance

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Affect, curiosity, and socialization-related learning:
A path analysis of antecedents to job performance

The subject of affect or emotions, until recent times, has been mindfully sidestepped in organizational settings because its study does not easily lend itself to empirical investigation (Turnbull, 1999; Fineman, 1993). Nevertheless, a wide variety of emotions and emotion-based phenomena are being increasingly researched as potential predictors of organizational behaviors. In particular, both affective states and the disposition to experience affective states (i.e., a stable personality trait) have been shown to have possible relevance in the way individuals perform their jobs.

While researchers have found a correlational relationship between affect and job performance in general, it often has been found to be weak and questionably meaningful. Cote (1999), noting the state of the current research, proposed that there may be some moderator or mediator of the relation between affect and job performance. To more fully understand this association, she called for investigating this relationship by examining affects as short-term states and long-term traits because little research has been done in this area. This study explores potential mediators of the relationship between both state and trait affect and job performance. Specifically, we investigate the influence of anger and anxiety on curiosity and the subsequent relationship between curiosity and socialization-related learning as antecedents of job performance.

Conceptual Framework

Kozlowski (1995) defined organizational socialization as the process by which new employees learn more about the organization and become fully assimilated insiders. Socialization assists the newcomer in adapting to their work environment by facilitating adjustment to the organization's values and norms; by clarifying role identities; by developing job- and performance-related skills and capacities; and by learning to whom to turn for information about interpreting organizational uncertainties (Gardner & Kozlowski, 1993; Miller & Jablin, 1991). This process of "learning the ropes" for a newcomer has

been demonstrated to be consistent whether in union vs. nonunion settings (Baker, 1992), the healthcare industry (Fisher, 1985; Lusch, Boyt, & Schuler, 1996); the federal government (Morton, 1993); law enforcement agencies (Bahn, 1989); and engineering firms (Lee, 1994). Further, there is evidence that males and females navigate, in general, through the socialization process in a reasonably similar manner. Amason and Allen (1997) reported that gender differences were not found in the relationship between either engineering or university employee perceptions of top management and supervisor communication, nor did dissimilarities emerge when rating the quality of information received from coworkers, all important aspects of "fitting" into or being efficiently socialized into an organization.

Much of the research concentrates on viewing the socialization process as primarily a process of newcomer assimilation (e.g., Lee, 1994), yet there is considerable support for the notion that socialization occurs under other circumstances. Schein (1968; 1988), for instance, proposed that organizational socialization not only occurs upon entry into the organization, but when one transfers between departments, gets promoted to another rank, or when the individual goes to school and returns to the organization. Socialization occurs most likely any time one acquires a new supervisor, belongs to a new work group, or when training a newcomer; socialization is surely not unidirectional. Falcione and Wilson (1988) further clarify the issue by claiming that socialization is best considered to be a continuous process that is vital throughout one's career, since there is an ever-present need to learn, adapt, and develop in response to marketplace contingencies.

Currently, there are two main approaches to investigating organizational socialization. One favors examining issues more distal to the newcomer, such as the adoption of the traditions and culture of an organization, that is, what is learned (e.g., Schein, 1968, 1988; Van Maanen & Schein, 1979). A more recent research emphasis involves more proximal factors that are related to how learning occurs in relation to acquiring the information and job knowledge required to perform one's expected job tasks and

roles (e.g., Copeland & Wiswell, 1994; Miller & Jablin, 1991). For the purposes of this study, we will focus on the latter approach, that is, how the learning related to the socialization process occurs.

We argue that socialization-related learning may be an important mediator between affect and job performance. Ostroff and Kozlowski (1992) found that the socialization process has an important relationship to job performance because the process of learning the ropes provides the employee with important technical and interpersonal information necessary for optimal job performance. Further, Lee (1994) discovered that high performance new engineers were more connected into the company's interpersonal communication networks, while interestingly stronger social ties with their newcomer peers predicted negative job performance. Regardless, without proactively acquiring this all-important job-related information through observation, experimentation, asking questions, and being therefore curious, less workplace learning is assured and job performance suffers (Miller & Jablin, 1991; Kozlowski, 1995; Reio, 1997).

Curiosity and Affect

An antecedent of the learning associated with the socialization process or socialization-related learning may be curiosity, which has been found to increase learner attention and foster information-seeking behavior (Berlyne, 1960; 1978; Driscoll, 2000; Giambra, Camp, & Grodsky, 1992), and promote adaptive advantage (Frijda, 1994). Curiosity has been variously identified as an emotion (Frijda, 1994; Loewenstein, 1994) and a cognitive condition (Clore, Ortony, & Foss, 1987). Cognition and emotion are clearly inextricably linked (see Derryberry & Tucker, 1992; Lazarus, 1982); nonetheless, the cognitive element associated with the emotion curiosity may act as a mediator between learning and more overtly affective conditions such as anger and anxiety. Anger may be seen as a negative affect in response to a "demeaning offense against me and mine" (Lazarus, 1994, p. 164); anxiety may be seen as a negative affect as a result of facing an "uncertain, existential threat" (Lazarus, 1994, p. 164). Tobias (1985) hypothesized that negative affects such as anxiety interfere with learning by dividing learner attention and

decreasing concentration. One may initially think of anger as an emotion that would be negatively associated with an increase in curiosity or learning. However, there is some evidence that anger may foster learning. For example, Mandler's (1984) interruption theory holds that frustration (a mild form of anger) associated with interruption of goal achievement may result in active attempts to mitigate further attempts to achieve goals. In other words, anger may drive an individual to explore and learn new ways to achieve otherwise thwarted goals.

Thus, we propose that emotions such as anxiety and anger influence and may even produce the affective-cognitive condition of curiosity, which fosters the socialization-related learning that positively influences job performance. The present study is an attempt to explore this model under conditions of both state-based and trait-based affects. Emotional states are transient affective episodes in response to events; emotional traits are enduring tendencies to experience certain emotions.

Method

Participants. The cross-sectional sample consisted of 81 women and 152 men. There were 11 females and 24 males who were 17 to 20 years old, 15 females and 62 males who were 21 to 29 years of age, 23 females and 37 males who were 30 to 39 years old, 23 females and 25 males who were 40 to 49 years old, and 9 females and 4 males who were 50 or older. The mean age of the sample was 32.5 years (SD = 8.8).

Most (86 percent) of the participants were Caucasian, 9 percent were African-American, 3 percent were Hispanic, and slightly more than 1 percent were Asian. Almost 64 percent of the subjects earned less than $30,000 per year; only 22 percent of the participants earned more than $40,000 annually. Approximately 62 percent of the sample had at least some college education. Overall, the typical participant was a male Caucasian under the age of 40, with some college education and an annual salary of less than $30,000 per year.

Procedure. Participants were obtained from four well-established, service-industry companies in the Washington, D.C., metropolitan area (N = 233). A battery of tests, of which the instruments examined in this study were a large part, and demographic data were collected at the participants' places of work, with an overall administration time of roughly 40 minutes. All instruments were paper-and-pencil questionnaires.

Instrumentation. ***Affect measures.*** A wide range of measures reported in the literature were investigated. Adult anger, anxiety, and curiosity scales were found most commonly to have been designed as self-report measures measuring the respective constructs as either affective states and/or personality traits (e.g., Boyle, 1983). From our examination of the literature, one measure, the State-Trait Personality Inventory (STPI; Spielberger, Barker, Russell, De Crane, Westberry, Knight, and Marks, 1980), was selected because it most closely met the needs of this exploratory study and the conventional reliability (.71-.82) and validity standards of our field.

The STPI consists of both state and trait curiosity scales (four-point scale, 10 questions each), in addition to 10-item state and trait subscales of anger and anxiety. All of the state affect subscales ask the respondent to describe their present feelings, while the trait affect subscales ask the respondent to describe how they feel in general.

Socialization-Related Learning measures. Socialization-related learning was our operationalization of workplace learning and was determined with a modified version of the Workplace Adaptation Questionnaire (WAQ; Morton, 1993), a self-reported, 22-item instrument, consisting of three subscales measuring employee socialization-related learning and one subscale measuring satisfaction with learning experiences. Participants indicate to the extent to which they agree with each item on a five-point scale ranging from "strongly disagree" to "strongly agree." The four subscales are Job Knowledge, Acculturation to the Company, Establishing Relationships, and Satisfaction with Learning Experiences.

The first three subscales are designed to measure, in essence, the learning associated with the socialization process.

The questionnaire was originally a 19-item introspective instrument. We supplemented the job-knowledge subscale with three additional items suggested by Morton's (1993) factor-analytic work to add more technically oriented questions to the instrument. The first three subscales are concerned with assessing the socialization or learning process at work: establishing relationships (five items), acculturation (five items), and job knowledge (eight items), with corresponding alphas of .85., .86., and .96. The last subscale, satisfaction with learning experiences, is a quite different construct and is not included in the total instrument score.

The Job Knowledge subscale refers to the extent respondents report mastering the tasks of their jobs (e.g., "I can complete most of my tasks without assistance"). Acculturation to the Company is a 5-item subscale measuring the extent to which employees have learned the norms, values, and culture of their organizations (e.g., "I know what the acceptable image is for my organization."). Establishing Relationships, the 5-item third subscale, assesses employees' ability to identify coworkers who can provide useful information or who know their way around the organization (e.g., "I know which of my coworkers are interested in helping me"). Lastly, the 4-item Satisfaction with Learning Experiences subscale evaluates employees' satisfaction with their learning experiences at the organization (e.g., "I am satisfied with the feedback I have received about my performance on the job"). This final subscale was not relevant to this study.

Examining the instrument through our preliminary factor-analytic work provided substantial support for continued use of the instrument. Internal reliabilities (.82-.96) and item factor loadings on each subscale were virtually identical to those reported by Morton (1993) providing evidence of the instrument's subscale factor stability and generalizability as her research was conducted with workers in a government agency (see Reio, 1997, for a detailed examination of her research instrument).

Job Performance measures. Job performance and its two dimensions, Technical and Interpersonal Performance (Motowidlo & Van Scotter, 1994), were assessed with a self-reported questionnaire developed for this study. The use of this instrument was based upon Reeve's (1989) exploratory research measuring task performance in a laboratory setting. The six-item instrument consists of three, two-item subscales; Overall Job Performance, Technical Job Performance, and Interpersonal Job Performance. Sample items include "How would you rate your overall job performance?" (overall), "How would you rate your overall level of technical skill knowledge?" (technical), and "How would you rate your overall level of interpersonal skill knowledge?" (interpersonal). The other question in each subscale asks respondents to compare their overall job performance, and technical and interpersonal skill knowledge to that of their peers. Thus, each of the six questions asks employees how they perceive their current performance on their jobs. The total instrument's reliability was .90.

Procedures. The STPI, the socialization-related learning, and job performance measures, and a demographic survey were administered at the participants' places of work. The four companies all participated on the condition of anonymity and were provided with a summary of the results.

Data Analysis. The Statview 4.0 statistical package for the Macintosh was used for all analyses except for determining the standardized path coefficients, for which the EQS for Windows, version 5.4 was used.

Results

The means, standard deviations, and alphas for each of the 6 affect subscales, the socialization-related learning instrument (only the WAQ total scale was used for final analyses), and the job performance questionnaire (total scale score only) are presented in Table 1. Secondly, zero-order correlational values between the variables of interest were determined and investigated for meaningfulness (see Table 2).

Table 1. Descriptive Statistics for Instrument Subscales

Scale	Subscale	M	SD	Alpha	Number of Items
SANG	State Anger	13.8	6.6	.77	10
SANX	State Anxiety	17.7	5.5	.78	10
SCUR	State Curiosity	27.4	5.1	.79	10
TANG	Trait Anger	20.6	6.0	.78	10
TANX	Trait Anxiety	18.7	5.5	.76	10
TCUR	Trait Curiosity	28.1	5.2	.80	10
WAQ	Workplace Adaption Questionnaire	73.5	8.6	.80	18
JP	Job Performance	29.9	6.4	.71	6

Note. N = 233

Table 2. Research Variable Total Scale Intercorrelations

	SANX	SANG	SCUR	TANX	TANG	TCUR	WAQ	JP
1	1.00	.67	.01	.61	.58	**.04**	.10	.16
2		1.00	**.13**	.46	.72	**.16**	**.07**	**.07**
3			1.00	**.01**	**.22**	.78	.27	.28
4				1.00	.55	**.05**	.08	.08
5					1.00	**.29**	**.10**	**.12**
6						1.00	.31	.31
7							1.00	.51
8								1.00

Note. N = 233; All bold faced numbers represent negative correlations.

To further analyze the hypothesized relationships of this research, we employed a structural modeling approach. We evaluated two structural models (henceforth called "path models") with observed variables (Kline, 1998). Figures 1 and 2 represent these two theoretical path models.

Two a priori determined (see Figures 1 & 2) "recursive" path models suggesting the causal influence of anger, anxiety, and curiosity on socialization-related learning and ultimately job performance were tested. The first model, Figure 1, represents affect as a state, while Figure 2 represents the affect variables as a disposition or trait. Standardized path coefficients were calculated by EQS from a combination of the correlational matrix containing the five main study variables (anger, anxiety, curiosity, socialization-related learning, and job performance), their covariances, and their standard deviations using a maximum likelihood criterion for estimation. All of the path coefficients were significant at at least the $p < .05$ level. See Table 3 for the presentation of various fit indexes.

Table 3. Summary of Fit Indexes for the Models Examined

Model	CFI	AGFI	MFI	IFI	SRMR
State	.95	.90	.97	.95	.05
Trait	.99	.97	.99	.99	.03

Note. CFI = Comparative Fit Index;
AGFI = Adjusted Goodness of Fit Index;
MFI = McDonald's Fit Index;
IFI = Bollen's Incremental Fit Index;
SRMR= Standardized Root Mean-Square Residual

The first model (Figure 1) is an "over-identified" path model in which Job Performance is the dependent variable. State anger and anxiety had a direct causal influence on state curiosity, which in turn had both a direct causal influence on socialization-related learning and job performance. Finally, socialization-related learning had a moderately strong causal influence on job performance. With a CFI of .95, the data failed to disconfirm the model and all of the other generated fit indexes fully supported this

interpretation. Similar results were found with the trait model (Figure 2) as the CFI was .99. These findings support our hypothesis that both state/trait positive and negative affect have a meaningful influence on workplace job performance, albeit through the mediation of curiosity and learning.

To validate these path-analytic results, the next steps would be to, as Kline (1998) recommends, employ the following three conventions: replicating the model across independent samples; obtaining substantiating evidence from experimental studies involving the variables of interest; and accurately predicting the effects of various interventions on the model. We believe this additional evidence would be essential to fully support our theoretical models.

Conclusions and Implications

The findings of this study provide empirical support for the notion that some types of emotion, quite often overlooked by organizational researchers, can either foster or deter workplace job performance through its influence on individual learning. Clearly, the findings associated with both anger and anxiety support our theoretical model. Perhaps the most important finding of this exploratory study was that curiosity may be an important mediator between emotion and job performance. Indeed, future studies should explore the relationship of other emotions to curiosity as an affective-cognitive condition. If levels of job performance are to be maintained or improved, as is often required in our competitive world, curiosity and learning must be fostered. Thus, consideration must be given to worker emotions otherwise learning and job performance could be impeded.

These findings also have some very real practical applications for organizations. Certainly, the negative effect of both state and trait anxiety on curiosity may impede learning and performance in organizational contexts. Deming (1986) argued that fear and anxiety must be driven out of the workplace in order to foster optimum performance and quality. Anxiety reduces creativity (Higgins, Qualls, & Couger, 1992), inhibits memory and learning (Bower, 1994), and increases the tendency for depression (Clark & Watson, 1991). This study adds to the plethora of negative effects of anxiety that

can influence large-scale organizational performance. Leaders would be well served to address issues of anxiety in the workplace.

In this study, the positive influence of anger on curiosity is supportive of the theory that thwarted attempts to achieve a goal may foster a more concerted effort toward goal achievement (Mandler, 1984). Ironically, many theories connecting emotions and organizations, learning, or creativity argue for a negative influence of anger since it is an otherwise negative emotion (e.g., Higgins, Qualls, & Couger, 1992; Marsella, 1994). If anger stimulates the search for alternative methods for goal achievement, it may be important for organizational leaders to be aware of the potential consequences of such behavior. On the one hand, if the otherwise thwarted goals are aligned with larger organizational goals, such behavior would have positive consequences for the organization. On the other hand, if those thwarted goals that stimulated the anger are in conflict with larger organizational goals, the achievement of those goals may have negative consequences for the organization. If leaders are able to identify the existence of anger and the associated goals, they may be able to manage the behaviors for a more positive organizational outcome.

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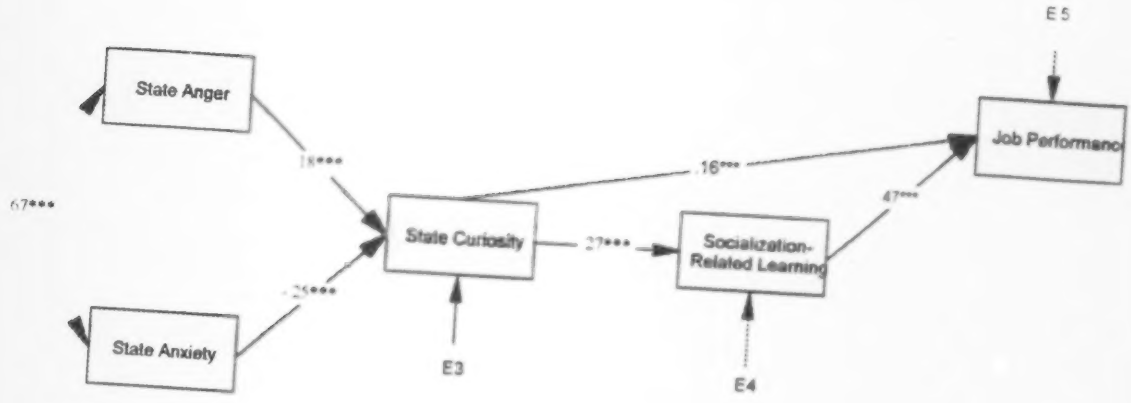

Figure 1 Affective states, curiosity, learning, and Job Performance Path Model

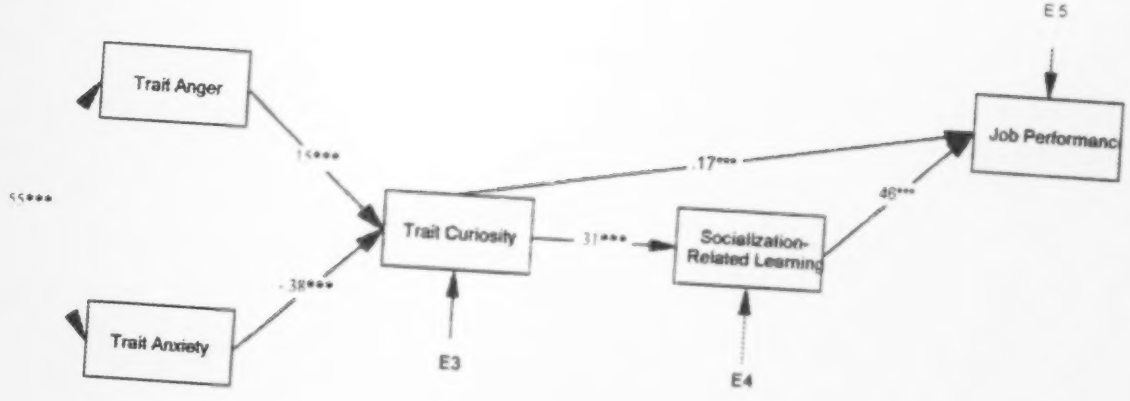

Figure 2 Affective traits, curiosity, learning, and Job Performance Path Model

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